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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,734	08/25/2003	Klaus Moeller	23390-000121/US	1155
30593	7590	09/28/2004	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			CHAU, COREY P	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/646,734

Applicant(s)

MOELLER ET AL.

Examiner

Corey P Chau

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 28 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/25/03, 4/28/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-27, drawn to sound masking system, classified in class 381, subclass 73.1.

Group II, claim(s) 28-29, drawn to housing enclosure for a sound masking unit, classified in class 174, subclass 50.

2. During a telephone conversation with Gary Yacura on September 17, 2004 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-27. Affirmation of this election must be made by applicant in replying to this Office action. Claims 28-29 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

Art Unit: 2644

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-7, 12, 13, 17, 18, and 20-27 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of copending Application No. 10/618635. Although the conflicting claims are not identical, they are not patentably distinct from each other because Claims 1-22 of application no. 10/618635 falls entirely within the scope of the instant Claims 1-7, 12, 13, 17, 18, and 20-27 or, in other words Claims 1-22 of application no. 10/618635 are obvious over the instant Claims 1-7, 12, 13, 17, 18, and 20-27. The Claims 1-22 of application no. 10/618635 is a broader version of the instant Claims 1-7, 12, 13, 17, 18, and 20-27 and is therefore obvious of the instant Claims 1-7, 12, 13, 17, 18, and 20-27.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 1-16, 20-21, and 23 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18, and 20 of copending Application No. 09/791802. Although the conflicting claims are not identical, they are not patentably distinct from each other because Claims 1-18, and 20 of application no. 09/791802 falls entirely within the scope of the instant Claims 1-16, 20-21, and 23 or, in other words Claims 1-18, and 20 of application no. 09/791802 are obvious over the instant Claims 1-16, 20-21, and 23. The Claims 1-18, and 20 of

Art Unit: 2644

application no. 09/791802 is a broader version of the instant Claims 1-16, 20-21, and 23 and is therefore obvious of the instant Claims 1-16, 20-21, and 23.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding Claim 2, it is unclear as to which communication interface "the communication interface" is referring to because Claim 1 discloses a sound masking unit includes a communication interface and a control unit having a communication interface. For the purpose of examining, it is assume "the communication interface" is referring to the sound masking unit including a communication interface.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-9, 17-21, and 23-27 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No 4686693 to Ritter.

Regarding Claim 1, Ritter discloses a sound masking system for controlling the ambient noise level in a physical environment (i.e. remotely controlled sound mask), said sound masking system comprising: (a) a communication network spanning at least a portion of said physical environment (i.e. the communication network comprises the remote control 100 and the sound masking unit, which span a portion of the physical environment. The sound masking unit communicates with the remote control by way of sound level meter provided in the remote control. Furthermore communication network does not require two way communication, for example satellite communication) (Fig. 5; column 7, lines 11-17; column 7, line 56 to column 8, line 4; claim 7); (b) a plurality of sound masking units (82,84) (Fig. 1), some of said sound masking units including a sound masking component (72) for generating a sound masking output signal (i.e. emits acoustic vibration) and said sound masking units including a communication interface (128,60) (Fig. 4) for coupling said sound masking units to said communication network for receiving control signals over said communication network (i.e. the hand-held controller 100 transmits radio signals to receiver 60, which is part of the sound masking unit, to control the emission of a masking noise. Therefore, the sound masking unit is coupled to the communication network to receiving control signals) (Fig. 1; column 1, lines 23-44); (c) a control unit (100), said control unit having a communication interface (102) (Fig. 3) for coupling said control unit to said communication network for transmitting control signals over said communication network to said sound masking

units (Fig. 1; column 4, line 65 to column 5, line 7), and said control signals including signals for selectively controlling the operation of said sound masking units (i.e. the remote controller being mobile and including means to transmit a short-range radio signal across open air ways to the programmable attenuator, the radio signal adapted to indicate a desired power level) (Claim 1).

10. Regarding Claim 2, Ritter discloses the communication interface comprises an address component (68) for recognizing control signals intended for the sound masking unit associated with said address component (column 8, lines 26-52).

11. Regarding Claim 3, Ritter discloses said control unit includes an address generator for assigning addresses to said sound masking units (i.e. addressing circuitry to identify particular zone units or groups of zone unit that will decode address signals and respond to the page)(column 8, lines 26-52).

12. All elements of Claim 4 are comprehended by Claim 3. Claim 4 is rejected for reasons stated above apropos to Claim 3.

13. Regarding Claim 5, Ritter discloses said sound masking unit includes a control component, said control component being responsive to at least some of said control signals for controlling characteristics of said sound masking output signal (Fig. 1; column 4, lines 23-52).

14. Regarding Claim 6, Ritter discloses said controllable characteristics of said sound masking output signal include a variable contour characteristic (Fig. 1; column 4, lines 23-52; column 8, lines 5-25).

Art Unit: 2644

15. Regarding Claim 7, Ritter discloses said controllable characteristics of said sound masking output signal include a variable gain characteristic (Fig. 1; column 4, lines 23-52).

16. Regarding Claim 8, Ritter discloses said controllable characteristics of said sound masking output signal include a variable frequency characteristic (Fig. 1; column 4, lines 23-52; column 8, lines 5-25).

17. Regarding Claim 9, Ritter discloses said controllable characteristics of said sound masking output signal include a paging volume characteristic (Fig. 1; column 4, lines 23-52; column 8, lines 26-34).

18. Regarding Claim 17, Ritter discloses a paging component (64), said paging component comprising a plurality of input ports for receiving a plurality of paging signals, and a selector coupled to said input ports for selecting one or more of said paging signals and a routing component for routing said selected paging signals over said communication network and one or more of said sound masking units inputting one of said selected paging signals for announcement in response to a control command received from said control unit (Fig. 1; column 8, lines 26-64).

19. Regarding Claim 18, Ritter discloses control command is transmitted to a plurality of sound masking units to define a paging zone, and said paging zone defining a destination for one of said selected paging signals (column 8, lines 26-64).

20. Claim 19 is essentially similar to Claim 17 and is rejected for the reasons stated above apropos to Claim 17.

21. Claim 20 is essentially similar to Claim 1 and is rejected for the reasons stated above apropos to Claim 1. Ritter also discloses said sound masking circuit comprises a random noise generating component (20) for generating an incoherent signal output, an equalizer component (62) for receiving the incoherent signal output and generating an incoherent signal output with a predetermined contour, and an output amplifier (70) for amplifying said contour incoherent signal output, and said programmable controller (30) including a component for altering the contour of said incoherent signal output in response to a control command from said control unit (Fig. 1; column 4, lines 23-52; column 8, lines 5-25).

22. Regarding Claim 21, Ritter discloses said sound masking circuit (Fig. 1) comprises an equalizer component (62) for receiving the incoherent signal output (i.e. signal outputted from noise source 20) and generating an incoherent signal output with programmable spectral characteristics in response to a control command from said programmable controller (30) (Fig. 1; column 4, lines 23-52; column 8, lines 5-25).

23. Claim 23 is essentially similar to Claim 2 and is rejected for the reasons stated above apropos to Claim 2 (Fig. 7; column 8, lines 26-52).

24. Claim 24 is essentially similar to Claims 1 and 3 and is rejected for the reasons stated above apropos to Claims 1 and 3.

25. Claim 25 is essentially similar to Claim 3 and is rejected for the reasons stated above apropos to Claim 3.

26. Claim 26 is essentially similar to Claim 17 and is rejected for the reasons stated above apropos to Claim 17.

27. Claim 27 is essentially similar to Claim 18 and is rejected for the reasons stated above apropos to Claim 18.

Claim Rejections - 35 USC § 103

28. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

29. Claims 10-16 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4686693 to Ritter in view of U.S. Patent No. 5386478 to Plunkett.

30. Regarding Claim 10, Ritter discloses a control unit (100) having a sound level meter provided in the control unit (100) to determine where undue variation in masking volume occurs across zones, but only generally, no specific hardware or software is taught. Therefore it would have been obvious to one having ordinary skill in the art to seek known sound level meter. Plunkett discloses a remote control with an acoustic sensor, wherein the acoustic sensor is a microphone used to sense sound and an electronic circuit means (i.e. computer) receiving signal input from the microphone to analysis and provide control information to perform adjustments (i.e. the microphone and the electronic circuit means operates as the sound level meter to sense sound and generate a control information in response to the sensed sound) (Fig. 1; abstract; column 1, line 60 to column 2, line 6; column 2, line 37 to column 3, line 8; column 4, lines 62-68; Claims 6-9). It would have been obvious to one having ordinary skill in the

Art Unit: 2644

art to employ any known sound level meter, such as that of Plunkett. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ritter with the teaching of Plunkett to utilize a microphone and an electronic circuit means (i.e. computer) as the sound level meter in the control unit (100) to provide the control unit with adjustment control information in order for the control unit to provide control signal to the sound masking units.

31. Regarding Claim 11, Ritter as modified disclose said sound masking units (82,84) include an equalizer (62) for adjusting spectral characteristics of said sound masking output signal in response to a spectral control signal (column 8, lines 5-25).

32. Regarding Claim 12, Ritter as modified discloses said computer (i.e. electric circuit means) includes a component for receiving sound level readings (i.e. microphone) for the physical environment and a component for generating an equalizer adjustment signal derived from said sound level readings (i.e. the electronic circuit means generates control information such as equalizer adjustment in response to the sound sensed by the microphone), and said control unit being responsive to said equalizer adjustment signal for generating said spectral control signal (Ritter, column 8, lines 5-25) .

33. All elements of Claim 13 are comprehended by Claim 12. Claim 13 is rejected for the reasons stated above apropos to Claim 12.

34. All elements of Claim 14 are comprehended by Claim 10. Claim 14 is rejected for the reasons stated above apropos to Claim 10.

Art Unit: 2644

35. Regarding Claim 15, Ritter as modified discloses said computer (i.e. sound level meter) includes a component for receiving sound level readings for the physical

36. environment (i.e. microphone)and a component for generating a volume level adjustment signal (i.e. electronic circuit means) (Plunkett, abstract; Claims 6-9) and said control unit being responsive to said volume level adjustment signal for adjusting the volume of said sound masking signal (Ritter, Fig. 1; column 4, lines 23-52).

37. Claim 16 is essential similar to Claim 15 and is rejected for the reasons stated above apropos to Claim 15.

38. Claim 22 is essentially similar to Claims 10 and 14 and is rejected for the reasons stated above apropos to Claims 10 and 14.

Conclusion

39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corey P Chau whose telephone number is (703)305-0683. The examiner can normally be reached on Monday - Friday 9:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on (703)305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 20, 2004



FORESTER W. ISEN
SUPERVISORY PATENT EXAMINER